The Wombeyan Karst: one hundred and fifty years of protection

Julia M. James

Email: jjam5907@usyd.edu.au

Abstract

The Wombeyan Karst is within the traditional territory of the Gundungarra and Wiradjuri people. In 1865 it was set aside specifically for the preservation of caves. Over time the New South Wales governance of the Wombeyan Karst has changed and at present it is governed by the NSW National Parks and Wildlife Service and is one of only four Karst Conservation Reserves in the country. Much of the land around this small reserve (571 hectares) has been cleared for agriculture. The karst contains building quality marble. 1915 saw the start of quarrying for marble in the reserve. In 1997, quarrying ceased and rehabilitation has taken place. In 150 years of tourism, the on-site management and staff have cared for and protected the karst environment. The Sydney Speleological Society has produced two books that record Indigenous and European history, cave exploration, geology, geomorphology, mineralogy, hydrology, palaeontology, invertebrate fauna and flora of the karst. Such material has been of immense value when considering nomination of the Wombeyan Karst for National and World Heritage. It is concluded that if Wombeyan Karst is heritage listed by Australia or the World it would gain additional protection.

Introduction and Discussion

The Wombeyan Karst was first reserved for water supply and other public purposes in 1865. It remained as Reserve No 8 until 1879 when it was reserved for the preservation of caves. Over time the New South Wales governance of the Wombeyan Karst has changed and at present it is governed by the NSW National Parks and Wildlife Service and is one of only four Karst Conservation Reserves in Australia.

Table 1: Government departments and Jenolan Caves Reserve Trust Periods of Governance of the Wombeyan Karst	
1864-1870	Lands
1870-1905	Mines
1905-1960	Intelligence and Information (State Railways)
1960-1985	Leisure, Sport and Tourism
1985-1989	Sport and Recreation
1989-2006	Jenolan Caves Reserve Trust
2006	National Parks and Wildlife Service
At present	NPWS (Office of Environment and Heritage)

The Wombeyan Karst is within the traditional territory of the Gundungarra and Wiradjuri peoples. Many open sites and artifacts have been discovered, indicating that the First Australians had a significant presence in the area and were the first custodians of it. Over the years, the NSW government engagement with indigenous communities has given opportunities for them to be again involved in environmental management and protection decisions that affect them. Today, Wombeyan is a recognized "aboriginal place" and the local people have successfully re-established their connections to country.

Much of the land around this small reserve (571 hectares) has been cleared for agriculture. The Wombeyan Karst has building quality marble. 1915 saw the start of quarrying for marble in the reserve and in quarries the building marble was extracted without the use of explosives, in order to protect the caves. By 1997, quarrying in the reserve had ceased and some rehabilitation has taken place. The marble karst and the caves it contains have great aesthetic appeal resulting in the most spectacular caves being developed for tourism. Wombeyan Creek has carved a way through the marble to flow into Victoria Arch and then into the Marble Way (see Figures 1 and 2). Waters that have fallen on the Wombeyan surface

have seeped through into the caves to form decorations that fill them from roof to floor (see Figures 3 and 4). Huge shawls (see Figures 5 and 6) that hang from the roofs and walls together with a large fallen stalactite indicate that there have been long periods of massive calcite deposition in the caves. Not all the decorations in the Wombeyan Caves are massive, some are delicate and some are rare (See Figures 7 and 8).

Figure 1: Victoria Arch, Fig Tree Cave: Photo Julia James

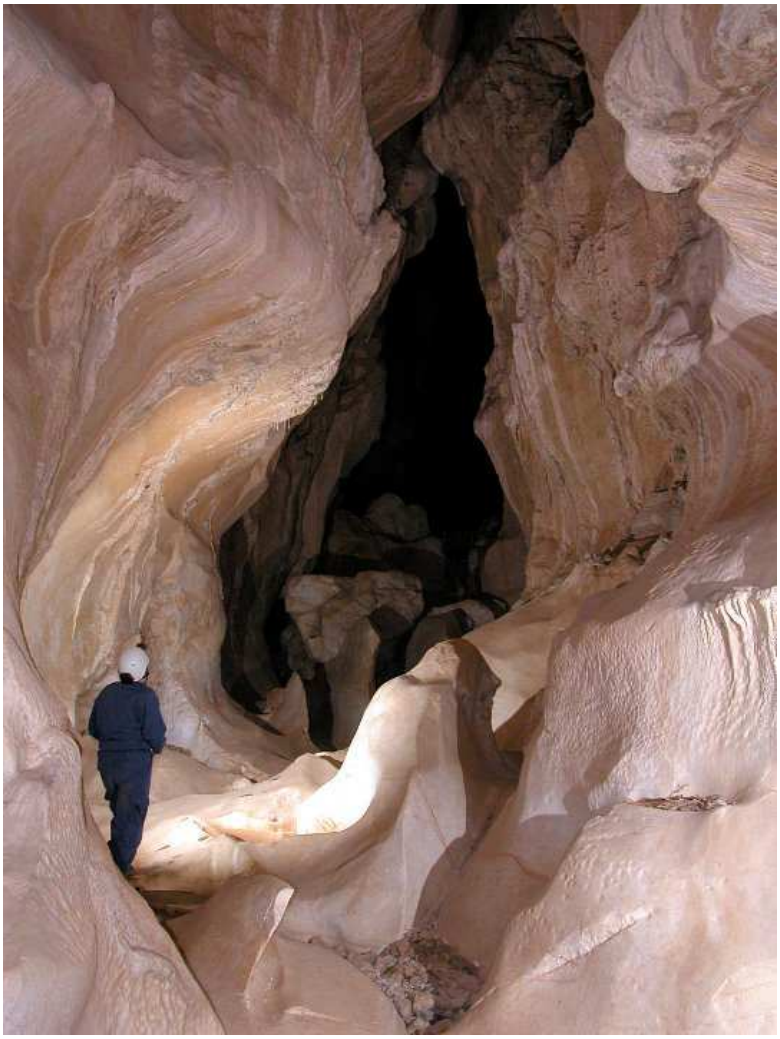

Figure 2: The Marble Way, Fig Tree Cave: Photo Alan Warild

Figure 3: The Roof in Coronation Cavern, Wollondilly Cave: Photo Alan Warild

Figure 4: Lots Wife and The Cockatoo, Wollondilly Cave: Photo Alan Warild

Figure 5: Shawls in Coronation Cavern, Wollondilly Cave: Photo Alan Warild

Figure 6: Large fallen stalactite, Fig Tree Cave: Photo Alan Warild

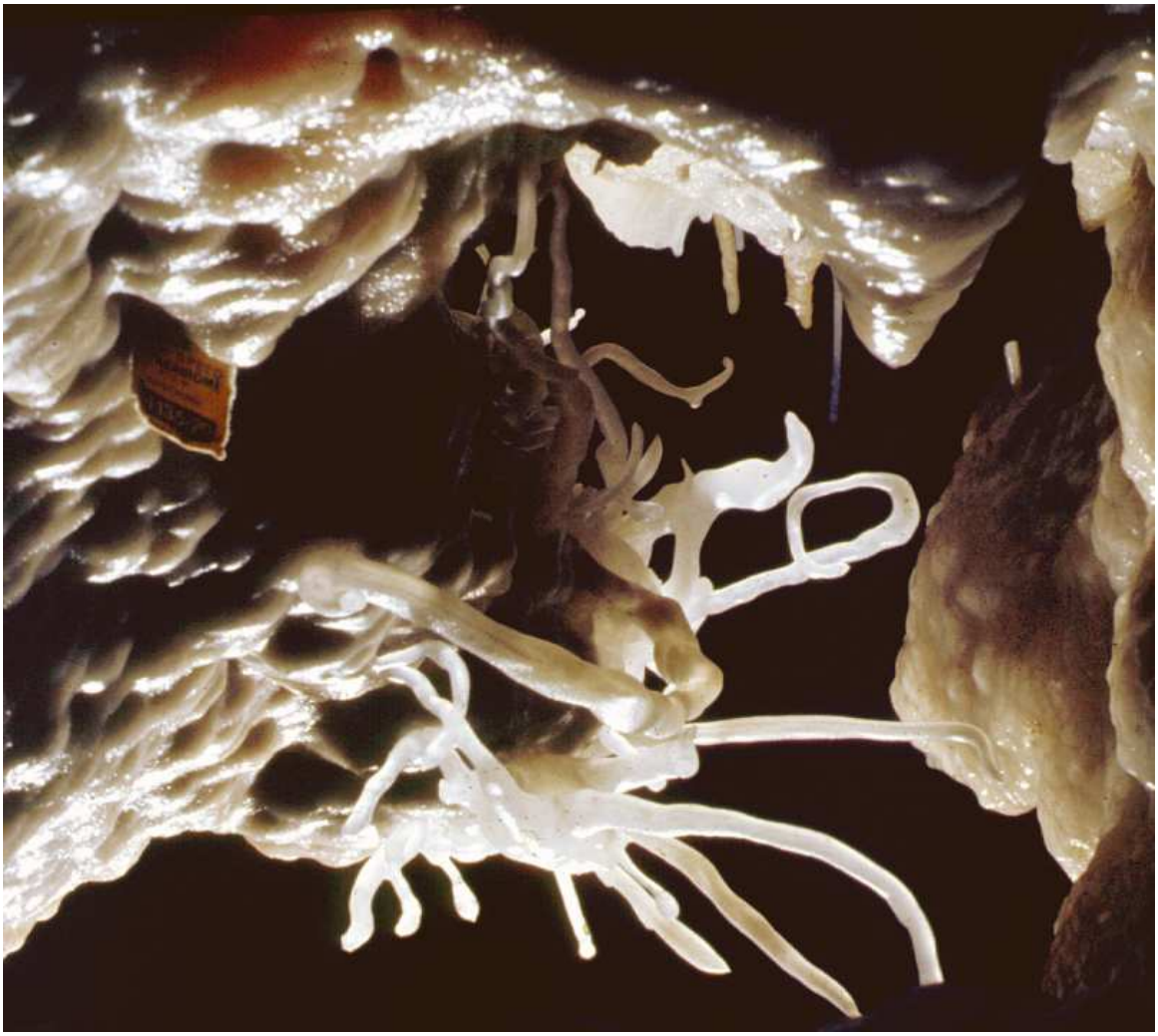

Figure 7: Helictites in Bouverie Cave: Photo Leslie Field

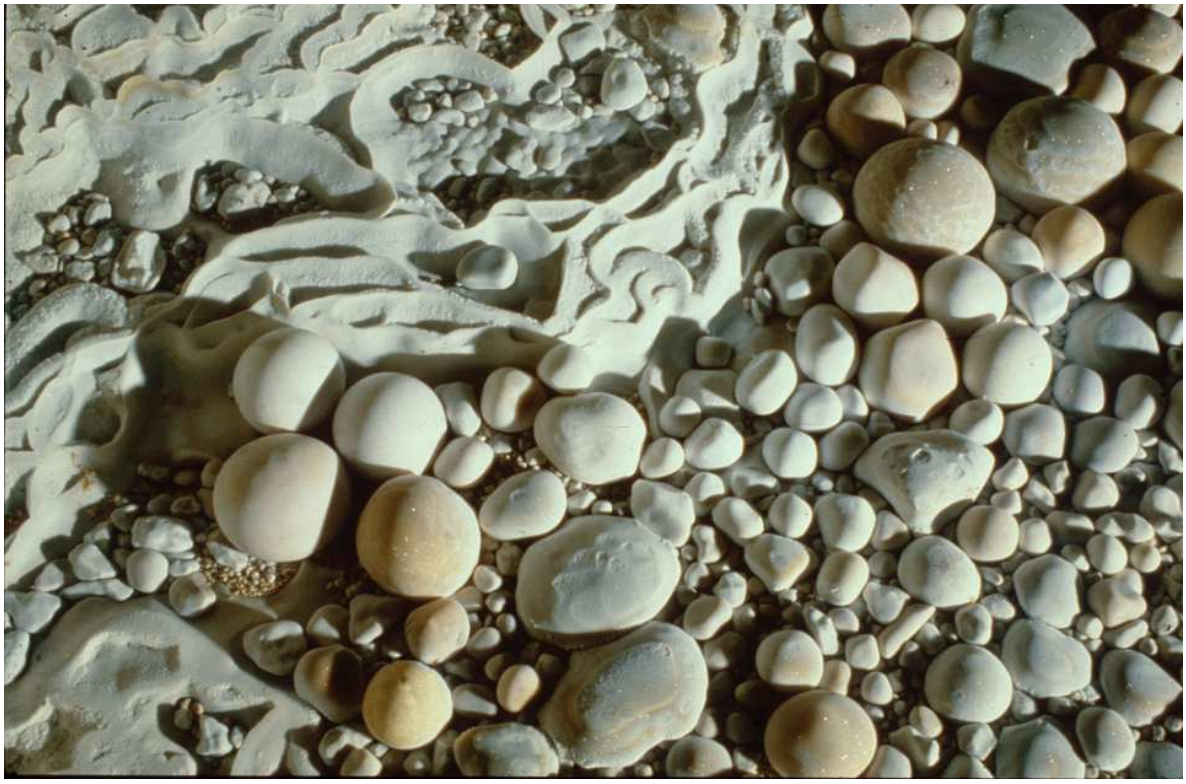

Figure 8: Cave Pearls: Photo Steve Babka

Europeans have visited the caves for more than 150 years. In 1868 they were formally protected when Charles Chalker was appointed Keeper of Caves. Since that time there has been a dedicated core of guiding staff at Wombeyan. The Sydney Speleological Society Occasional Paper No16 titled the *Guides of Wombeyan Caves 1864-2012* by John and Glenda Wylie reviews the careers of these custodians of the caves who have continued to care for and protected the karst environment. Special acknowledgements are given to the contributions of the caretakers, superintendents, managers two of which are from the Chalker Family.

A number of Speleological Societies and Universities have been active at Wombeyan surveying and carrying out research. The Sydney Speleological Society has produced two books, Wombeyan Caves and Caves and Karst of Wombeyan. These companion volumes record Indigenous and European history, cave exploration, geology, geomorphology, mineralogy, hydrology, palaeontology, invertebrate fauna and flora of the karst. As well as publishing detailed descriptions of caves with some surveys (see Figure 9). Such material has been of immense value when considering nomination of the Wombeyan Karst for National and World Heritage listing.

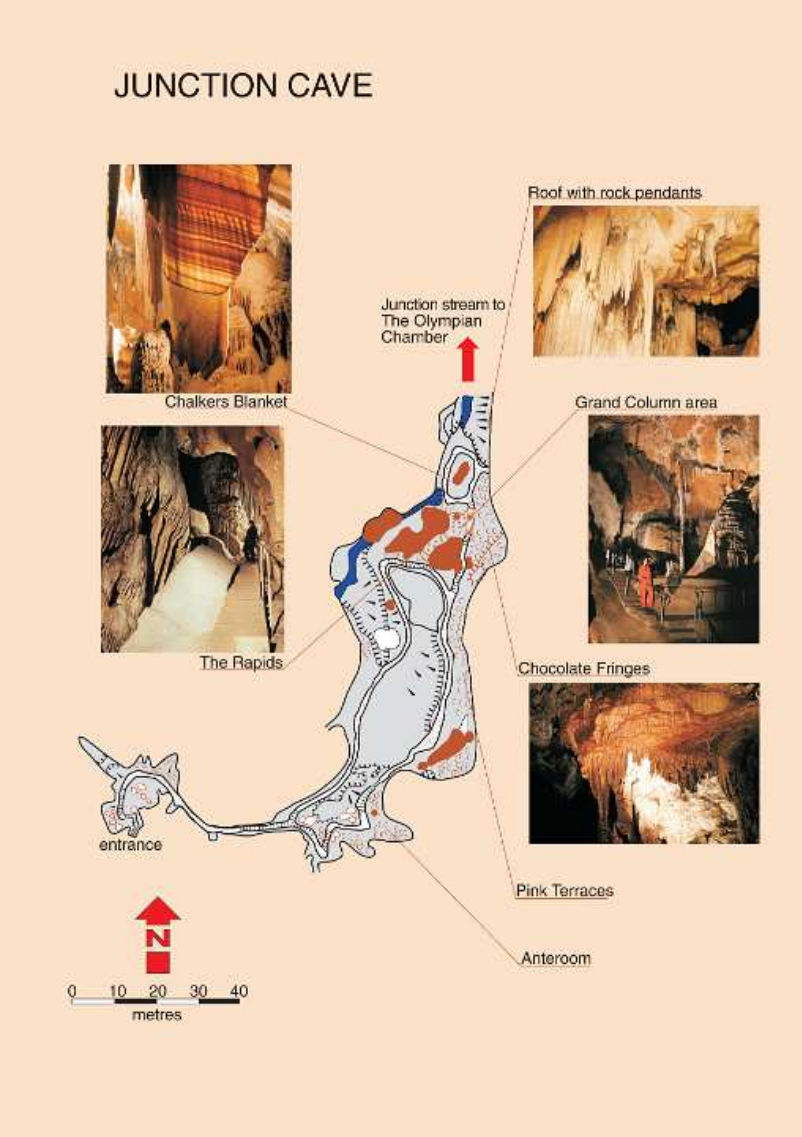

Figure 9: Map and accompanying photographic display of Junction Cave

In the past, the Commonwealth Department of Environment and Heritage convened an expert committee to establish the heritage values of Australian Karsts. Wombeyan was included in the study and it was proposed that it be grouped with other Eastern Highland karsts for nomination for National Heritage.

In 2000, the Greater Blue Mountains Area was inscribed for two of ten possible World Heritage criteria. They are:

vii. Be outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, freshwater, coastal and marine ecosystems and communities of plants and animals;

viii. Contain the most important and significant natural habitats for in-situ conservation of biological diversity including those containing threaten species of outstanding universal value from the point of view of science or conservation.

More recently, The Greater Blue Mountains World Heritage Area was given National Heritage recognition for the above two criteria.

The adjacent Wombeyan Karst was not included in the 2000 nomination and in 2008 a strong case was made for adding it in the Greater Blue Mountains World Heritage Area as it lies on the boundary (see Figure 10) and fulfils the above criteria. However at present, before a place can be nominated for World Heritage it is required to have National Heritage recognition.

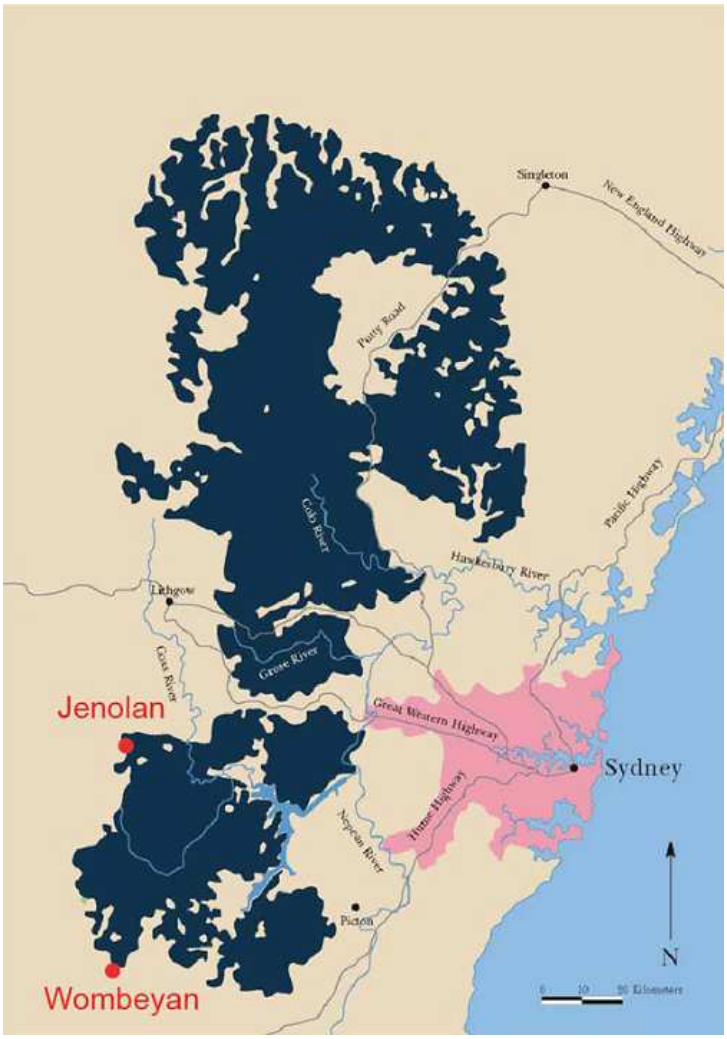

Figure 10: Greater Blue Mountains World Heritage Area showing location of Wombeyan and Jenolan Caves

The case for National Heritage for the Wombeyan Karst has been strengthened recently when The Greater Blue Mountains World Heritage Area Advisory Committee prepared a series of essays (yet to be published) supporting additional National Heritage recognition for cultural and additional natural heritage criteria for the Greater Blue Mountains World Heritage Area. Wombeyan was included in all of these essays.

A summary of the Wombeyan Karst values:

- Native vegetation at Wombeyan reflects its geology and geomorphology – only site for Chalker's wattle (Acacia chalkeri).
- It is a refuge for relict faunas with ancient lineage. Which have similarities to faunas that originated hundreds of millions of years ago in and around the super continents of Pangaea and Gondwana. The presence of such species provides vital clues to past climate and environmental conditions at Wombeyan. Wombeyan is a biodiversity "Hot Spot" with 23 cave-dependent species being recorded. There is a high level of endemism amongst the species with more than half the cave invertebrates found there only occurring at Wombeyan.
- The geoheritage of Wombeyan Karst is outstanding
- The marble caves are of exceptional beauty.
- Paleontological sites have produced valuable information on past mammal species.

The first two of the above dot points are important for they fulfil the criteria for which the Greater Blue Mountains was inscribed.

Conclusion

Whatever route is taken to obtain its inscription, the Wombeyan Karst deserves heritage recognition by Australia and possibly the World and as a result would gain additional protection.

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Capricorn Caves, Cyclones, Caves and Conferences

Ann Augusteyn

Capricorn Caves

Email: annaugust@bigpond.com

Abstract

Capricorn Caves, just north of Rockhampton in Central Queensland, will be hosting the Cave Guide School and ACKMA annual general meeting in May 2016. The team at Capricorn Caves look forward to showcasing the range of guest experiences, education programs, the new solar powered LED cave lighting and recovery from cyclone Marcia. The theme for the Guide School will be delivery of guest experiences not to be missed by any tour guide. See you in Capricorn!

Introduction

In February 2015 category five Cyclone Marcia tore her way through Central Queensland. The eye of the cyclone passed over Capricorn Caves and the destructive 200 kph winds left a tangled mass of fallen trees and vines. Amazingly no buildings were destroyed but electrical poles, cables and connections were flattened. We were without power for several days which meant no water, no sewerage, no refrigeration and of course no cave lights.

Fallen trees and tangled semi ever green vine thicket blocked cave paths.

But with the use of a generator we opened to the public just 11 days later. So when everything seemed weakened by this powerful cyclone, two things stayed incredibly strong. First, and not surprisingly, our 400-million-year-old caves proved very resilient! And secondly, and very importantly, the people of Capricorn Caves stayed strong — our passionate team and their families pulled together in a momentous recovery operation.